49 Protandry in Streptanthus — Rollins 1963]

LITERATURE CITED

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VIOLA PALUSTRIS L. IN ARIZONA. — This past spring there were sent to me specimens of a species of violet previously unreported for Arizona. Kearney and Peebles (1960) listed nine species for the state which are named below.

Viola palustris L. June 3, 1962. Collector V. W. Rhoton. Lake Number One (U.S. Forest Service name) on Heber-Payson Highway, about 25 miles from Heber, about 1/4 mile from edge of Mogollon rim. Elevation about 7200'. Coconino County, Arizona. Abundant in wet soil in a strip about 25' x 500' around the southwestern edge of the lake. Specimens of this collection are deposited in the herbaria of Arizona State College, Arizona State University and of Mr. V. W. Rhoton of Lakeside, Arizona.

This is the white-flowered form which is apparently more common in the southern Rocky Mountains than the typical blue-flowered plant. The nearest locations to the above that I am aware of are in the high mountain passes north of Durango, Colorado. Only two species of violet are commonly found in the mountains of Arizona. These are V. canadensis L. and V. nephrophylla Greene, which are occasional in pine and douglas fir forests in northern, northeastern, and southeastern Arizona. Viola Rafinesquii Greene, V. pedatifida G. Don, V. aurea Kellogg, and V. nuttallii Pursh occur very rarely in coniferous forests in northern and northeastern Arizona. Viola charlestonensis Baker & Clausen has been reported from a single location. Viola umbraticola H. B. K. is a form of V. nephrophylla that I have been unable to separate and therefore consider synonymous. The number of species in the state remains therefore at nine. - NORMAN H. RUSSELL, DEPARTMENT OF BOTANY, ARIZONA STATE UNIVERSITY, TEMPE, ARIZONA.